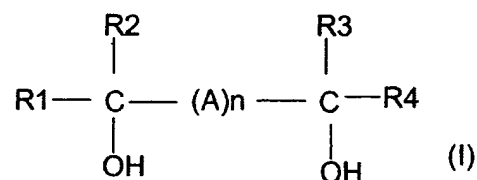


WHAT IS CLAIMED IS:

1. A composition, comprising, in a cosmetically acceptable medium,
at least one fluorescent dye that is soluble in the medium, and
at least one polyol with a molecular weight of less than 500 g/mol and
comprising more than three carbon atoms, of formula (I):



wherein:

A is a divalent radical of a hydrocarbon-based chain chosen from linear and branched, saturated and unsaturated hydrocarbon-based chains, optionally interrupted with from 2 to 10 hetero atoms and comprising from 1 to 35 carbon atoms,

R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from a hydrogen atom, C₁-C₂ alkyl radicals and C₁-C₆ mono- and polyhydroxyalkyl radicals, and

n is 0 or 1;

provided that the composition does not comprise, as a fluorescent agent, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium wherein the alkyl radical of the pyridinium nucleus is a methyl or ethyl radical, the alkyl radical of the benzene nucleus is a methyl radical, and the counterion is a halide.

2. The composition according to Claim 1, wherein the hydrocarbon-based chain of the divalent radical A does not comprise any hetero atoms.

3. The composition according to Claim 1, wherein the radical A is chosen from linear and branched alkylene groups comprising from 1 to 8 carbon atoms.

4. The composition according to Claim 1, wherein the at least one polyol of the formula (I) is chosen from 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, neopentyl glycol, isoprene glycol, hexylene glycol, 2,3-dimethyl-1,5-pentanediol, 2-methyl-1,3-propanediol, 3-methyl-1,5-pentanediol, 3-methyl-1,3,5-pentanetriol and 1,2,4-butanetriol.

5. The composition according to Claim 1, wherein the at least one polyol of the formula (I) is present in an amount ranging from 0.01% to 30% by weight, relative to the total weight of the composition.

6. The composition according to Claim 5, wherein the at least one polyol of the formula (I) is present in an amount ranging from 0.1% to 20% by weight, relative to the total weight of the composition.

7. The composition according to Claim 6, wherein the at least one polyol of the formula (I) is present in an amount ranging from 0.5% to 10% by weight, relative to the total weight of the composition

8. The composition according to Claim 1, wherein the optionally neutralized fluorescent dye is soluble in the cosmetically acceptable medium to at least 0.001 g/l at a temperature ranging from 15°C and 25°C.

9. The composition according to Claim 8, wherein the optionally neutralized fluorescent dye is soluble in the cosmetic medium to at least 0.5 g/l at a temperature ranging from 15°C to 25°C.

10. The composition according to Claim 9, wherein the optionally neutralized fluorescent dye is soluble in the cosmetic medium to at least 1 g/l at a temperature ranging from 15°C to 25°C.

11. The composition according to Claim 10, wherein the optionally neutralized fluorescent dye is soluble in the cosmetic medium to at least 5 g/l at a temperature ranging from 15°C to 25°C.

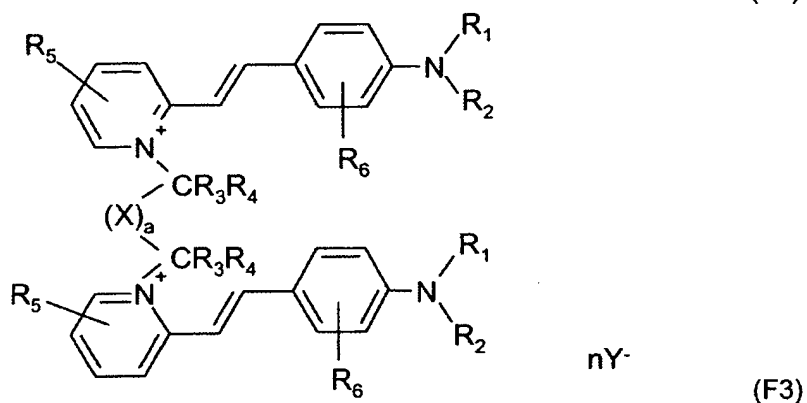
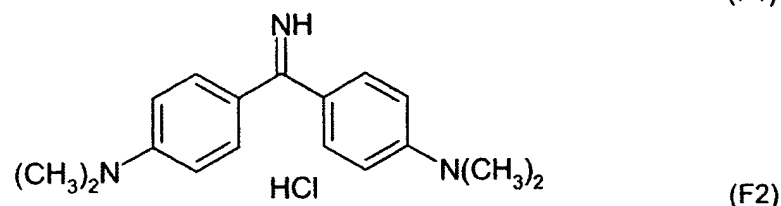
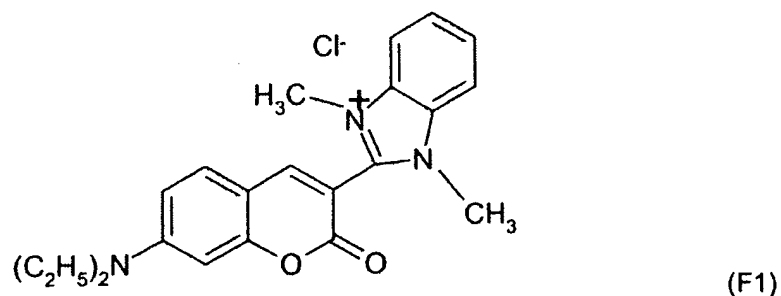
12. The composition according to Claim 1, wherein the at least one fluorescent dye is chosen from dyes in the orange range.

13. The composition according to Claim 1, wherein the at least one fluorescent dye provides a reflectance maximum that is in the wavelength range from 500 to 650 nanometers.

14. The composition according to Claim 13, wherein the at least one fluorescent dye provides a reflectance maximum that is in the wavelength range from 550 to 620 nanometers.

15. The composition according to Claim 1, wherein the at least one fluorescent dye is chosen from the fluorescent dyes belonging to the following families: naphthalimides; cationic and non-cationic coumarins; xanthenodiquinolizines; azaxanthenes; naphtholactams; azlactones; oxazines; thiazines; dioxazines; and polycationic fluorescent dyes of azo, azomethine and methine types.

16. The composition according to Claim 1, wherein the at least one fluorescent dye is chosen from the dyes of the following formulae (F1), (F2), and (F3):



wherein:

R_1 and R_2 , which may be identical or different, are each chosen from:

- a hydrogen atom;
- linear and branched alkyl radicals comprising from 1 to 10 carbon atoms, optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom;
- aryl and arylalkyl radicals, wherein the aryl group comprises 6 carbon atoms and the alkyl radical comprises from 1 to 4 carbon atoms; the aryl radical is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms optionally

interrupted and/or substituted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom;

- R₁ and R₂ may optionally be linked so as to form a heterocycle with the nitrogen atom and may comprise at least one other hetero atom, wherein the heterocycle is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals and is optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom; and
- R₁ or R₂ may optionally be engaged in a heterocycle comprising the nitrogen atom and one of the carbon atoms of the phenyl group bearing said nitrogen atom;

R₃ and R₄, which may be identical or different, are each chosen from a hydrogen atom and alkyl radicals comprising from 1 to 4 carbon atoms;

R₅, which may be identical or different, are each chosen from a hydrogen atom, halogen atoms, and linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, optionally interrupted with at least one hetero atom;

R₆, which may be identical or different, are each chosen from a hydrogen atom; halogen atoms; linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, optionally substituted and/or interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom and/or optionally substituted with at least one halogen atom;

X is chosen from:

- linear and branched alkyl radicals comprising from 1 to 14 carbon atoms and alkenyl radicals comprising from 2 to 14 carbon atoms, optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom and/or optionally substituted with at least one halogen atom;
- 5- and 6-membered heterocyclic radicals optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 14 carbon atoms, optionally substituted with at least one hetero atom; optionally substituted with at least one aminoalkyl radical chosen from linear and branched aminoalkyl radicals comprising from 1 to 4 carbon atoms, optionally substituted with at least one hetero atom; and optionally substituted with at least one halogen atom;
- fused and non-fused, aromatic and diaromatic radicals, optionally separated with at least one alkyl radical chosen from alkyl radicals comprising from 1 to 4 carbon atoms, wherein at least one of the aryl radicals is optionally substituted with at least one halogen atom or with at least one alkyl radical chosen from alkyl radicals comprising from 1 to 10 carbon atoms optionally substituted and/or interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom; and
- a dicarbonyl radical;
- provided that the group X possibly bears at least one cationic charge;

a is equal to 0 or 1;

Y⁻, which may be identical or different, are each an anion chosen from organic and mineral anions; and

n is an integer at least equal to 2 and at most equal to the number of cationic charges present in the fluorescent compound.

17. The composition according to Claim 16, wherein in the formula (F3) defining R_1 and R_2 , the linear and branched alkyl radicals are chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms.

18. The composition according to Claim 16, wherein in the formula (F3) defining R_1 and R_2 , the heterocycle is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms.

19. The composition according to Claim 1, wherein the at least one fluorescent dye is present in an amount ranging from 0.01% to 20% by weight, relative to the total weight of the composition.

20. The composition according to Claim 19, wherein the at least one fluorescent dye is present in an amount ranging from 0.05% to 10% by weight, relative to the total weight of the composition.

21. The composition according to Claim 20, wherein the at least one fluorescent dye is present in an amount ranging from 0.1% to 5% by weight, relative to the total weight of the composition.

22. The composition according to Claim 1, further comprising at least one additional non-fluorescent direct dye chosen from direct dyes of nonionic, cationic and anionic nature.

23. The composition according to Claim 22, wherein the at least one additional non-fluorescent direct dye is chosen from nitrobenzene dyes, azo dyes, anthraquinone dyes, naphthoquinone dyes, benzoquinone dyes, indigoid dyes, and triarylmethane-based dyes.

24. The composition according to Claim 22, wherein the at least one additional direct dye is present in an amount ranging from 0.0005% to 12% by weight, relative to the total weight of the composition.

25. The composition according to Claim 1, wherein the composition is in the form of a lightening dyeing shampoo.

26. The composition according to Claim 1, further comprising at least one oxidation base chosen from para-phenylenediamines, bis(phenyl)alkylenediamines, para-aminophenols, ortho-aminophenols and heterocyclic bases, and the acid and base addition salts thereof.

27. The composition according to Claim 26, wherein the at least one oxidation base is present in an amount ranging from 0.0005% to 12% by weight, relative to the total weight of the composition.

28. The composition according to Claim 26, further comprising at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols and heterocyclic couplers, and the acid and base addition salts thereof.

29. The composition according to Claim 28, wherein the at least one coupler is present in an amount ranging from 0.0001% to 10% by weight, relative to the total weight of the composition.

30. The composition according to Claim 1, further comprising at least one oxidizing agent.

31. The composition according to Claim 30, wherein the at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, and enzymes.

32. The composition according to Claim 31, wherein the persalts are chosen from

perborates and persulphates.

33. The composition according to Claim 31, wherein the enzymes are chosen from peroxidases and two-electron and four-electron oxidoreductases.

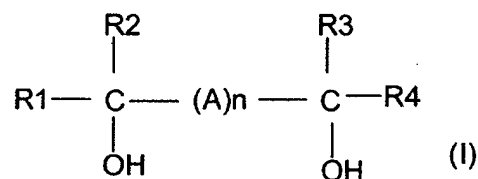
34. A process for dyeing human keratin fibers with a lightening effect, comprising:

a) applying to the keratin fibers a composition for a time that is sufficient to develop desired coloration and lightening, wherein the composition comprises, in a cosmetically acceptable medium,

at least one fluorescent dye that is soluble in the medium, and

at least one polyol with a molecular weight of less than 500 g/mol and

comprising more than three carbon atoms, of formula (I) below:



wherein:

A is divalent radical of a hydrocarbon-based chain chosen from linear and branched, saturated and unsaturated hydrocarbon-based chains, optionally interrupted with from 2 to 10 hetero atoms and comprising from 1 to 35 carbon atoms,

R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from a hydrogen atom, C₁-C₂ alkyl radicals and C₁-C₆ mono- and polyhydroxyalkyl radicals, and

n is 0 or 1;

provided that the composition does not comprise, as a fluorescent agent,

2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium wherein the alkyl radical of the pyridinium nucleus is a methyl or ethyl radical, the alkyl radical of the benzene nucleus is a methyl radical, and the counterion is a halide,

- b) optionally rinsing the keratin fibers,
- c) optionally washing the keratin fibers with shampoo and rinsing the keratin fibers, and
- d) drying the keratin fibers or leaving the keratin fibers to dry.

35. The process according to Claim 34, further comprising a preliminary operation comprising

separately storing, on the one hand, said composition, and, on the other hand, a composition comprising, in a cosmetically acceptable medium, at least one oxidizing agent,

mixing together the two compositions at the time of use,

applying this mixture to the keratin fibers for a time that is sufficient to develop the desired coloration,

rinsing the keratin fibers, and

optionally washing the keratin fibers with shampoo, rinsing the keratin fibers again and drying the keratin fibers.

36. The process according to Claim 34, wherein the keratin fibers are hair with a tone height of less than or equal to 6.

37. The process according to Claim 36, wherein the keratin fibers are hair with a tone height of less than or equal to 4.

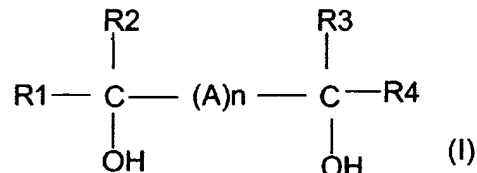
38. A process for coloring dark skin with a lightening effect, comprising applying to the skin a composition comprising, in a cosmetically acceptable

medium,

at least one fluorescent dye that is soluble in the medium, and

at least one polyol with a molecular weight of less than 500 g/mol and

comprising more than three carbon atoms, of formula (I) below:



wherein:

A is divalent radical of a hydrocarbon-based chain chosen from linear and branched, saturated and unsaturated hydrocarbon-based chains, optionally interrupted with from 2 to 10 hetero atoms and comprising from 1 to 35 carbon atoms,

R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from a hydrogen atom, C₁-C₂ alkyl radicals and C₁-C₆ mono- and polyhydroxyalkyl radicals, and

n is 0 or 1;

provided that the composition does not comprise, as a fluorescent agent,

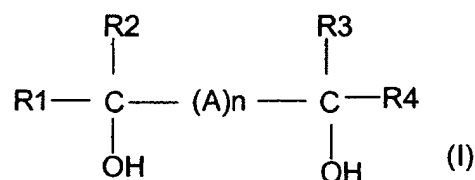
2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium wherein the alkyl radical of the pyridinium nucleus is a methyl or ethyl radical, the alkyl radical of the benzene nucleus is a methyl radical, and the counterion is a halide, and drying the skin or leaving the skin to dry.

39. A multi-compartment device for dyeing and/or lightening human keratin fibers, comprising

at least one compartment comprising a composition comprising, in a cosmetically acceptable medium,

at least one fluorescent dye that is soluble in the medium, and

at least one polyol with a molecular weight of less than 500 g/mol and comprising more than three carbon atoms, of formula (I) below:



wherein:

A is divalent radical of a hydrocarbon-based chain chosen from linear and branched, saturated and unsaturated hydrocarbon-based chains, optionally interrupted with from 2 to 10 hetero atoms and comprising from 1 to 35 carbon atoms,

R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from a hydrogen atom, C₁-C₂ alkyl radicals and C₁-C₆ mono- and polyhydroxyalkyl radicals, and

n is 0 or 1;

provided that the composition does not comprise, as a fluorescent agent, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium wherein the alkyl radical of the pyridinium nucleus is a methyl or ethyl radical, the alkyl radical of the benzene nucleus is a methyl radical, and the counterion is a halide, and

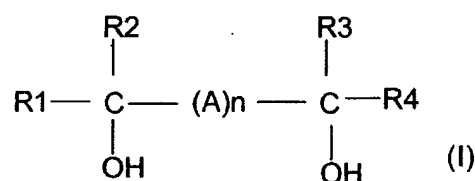
at least one other compartment comprising a composition comprising at least one oxidizing agent.

40. A method for dyeing a human keratin material with a lightening effect, comprising applying to the keratin material a composition comprising, in a cosmetically acceptable medium,

at least one fluorescent dye that is soluble in the medium, and

at least one polyol with a molecular weight of less than 500 g/mol and

comprising more than three carbon atoms, of formula (I) below:



wherein:

A is divalent radical of a hydrocarbon-based chain chosen from linear and branched, saturated and unsaturated hydrocarbon-based chains, optionally interrupted with from 2 to 10 hetero atoms and comprising from 1 to 35 carbon atoms,

R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from a hydrogen atom, C₁-C₂ alkyl radicals and C₁-C₆ mono- and polyhydroxyalkyl radicals, and

n is 0 or 1.

41. The method according to Claim 40, wherein the at least one fluorescent dye is chosen from dyes in the orange range.

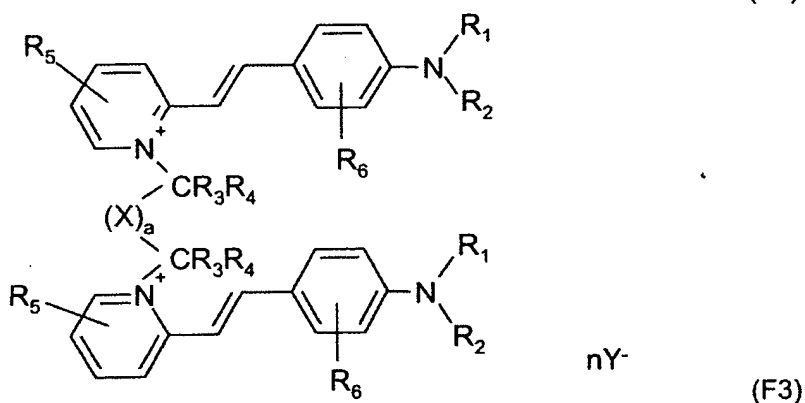
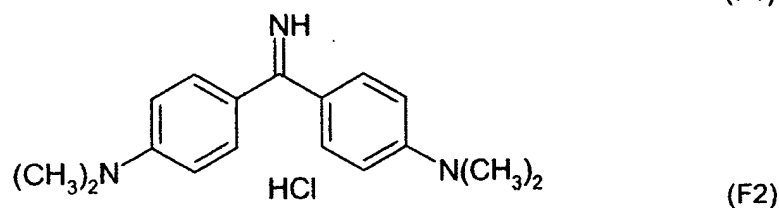
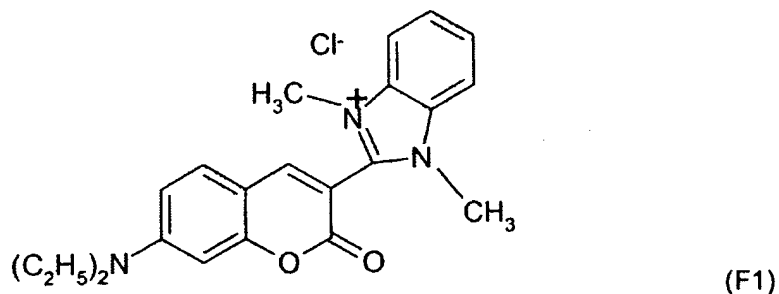
42. The method according to Claim 40, wherein the at least one fluorescent dye provides a reflectance maximum that is in the wavelength range from 500 to 650 nanometers.

43. The method according to Claim 42, wherein the at least one fluorescent dye provides a reflectance maximum that is in the wavelength range from 550 to 620 nanometers.

44. The method according to Claim 40, wherein the at least one fluorescent dye is chosen from the fluorescent dyes belonging to the following families: naphthalimides; cationic and non-cationic coumarins; xanthenodiquinolizines; azaxanthenes; naphtholactams; azlactones; oxazines; thiazines; dioxazines; and monocationic and polycationic fluorescent dyes of azo, azomethine and methine types.

45. The method according to Claim 44, wherein the xanthenodiquinolizines are chosen from sulphorhodamines.

46. The method according to Claim 40, wherein the at least one fluorescent dye is chosen from the dyes of the following formulae (F1), (F2), (F3), and (F4):



wherein:

R_1 and R_2 , which may be identical or different, are each chosen from:

- a hydrogen atom;
- linear and branched alkyl radicals comprising from 1 to 10 carbon atoms, optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom;
- aryl and arylalkyl radicals, wherein the aryl group comprises 6 carbon atoms and the alkyl radical comprises from 1 to 4 carbon atoms; the aryl radical is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms optionally interrupted and/or substituted

with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom;

- R_1 and R_2 may optionally be linked so as to form a heterocycle with the nitrogen atom and may comprise at least one other hetero atom, wherein the heterocycle is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals and is optionally interrupted and/or substituted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom; and
- R_1 or R_2 may optionally be engaged in a heterocycle comprising the nitrogen atom and one of the carbon atoms of the phenyl group bearing said nitrogen atom;

R_3 and R_4 , which may be identical or different, are each chosen from a hydrogen atom and alkyl radicals comprising from 1 to 4 carbon atoms;

R_5 , which may be identical or different, are each chosen from a hydrogen atom, halogen atoms, and linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, optionally interrupted with at least one hetero atom;

R_6 , which may be identical or different, are each chosen from a hydrogen atom; halogen atoms; linear and branched alkyl radicals comprising from 1 to 4 carbon atoms, optionally substituted and/or interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom and/or optionally substituted with at least one halogen atom;

X is chosen from:

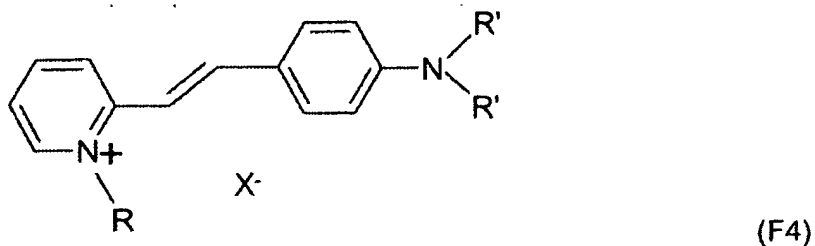
- linear and branched alkyl radicals comprising from 1 to 14 carbon atoms and alkenyl radicals comprising from 2 to 14 carbon atoms, optionally interrupted and/or

- substituted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and/or optionally substituted with at least one halogen atom;
- 5- and 6-membered heterocyclic radicals optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 14 carbon atoms, optionally substituted with at least one hetero atom; optionally substituted with at least one aminoalkyl radical chosen from linear and branched aminoalkyl radicals comprising from 1 to 4 carbon atoms, optionally substituted with at least one hetero atom; and optionally substituted with at least one halogen atom;
 - fused and non-fused, aromatic and diaromatic radicals, optionally separated with at least one alkyl radical chosen from alkyl radicals comprising from 1 to 4 carbon atoms, wherein at least one of the aryl radicals is optionally substituted with at least one halogen atom or with at least one alkyl radical chosen from alkyl radicals comprising from 1 to 10 carbon atoms optionally substituted and/or interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom; and
 - a dicarbonyl radical;
 - provided that the group X possibly bears at least one cationic charge;

a is equal to 0 or 1;

Y⁻, which may be identical or different, are each an anion chosen from organic and mineral anions; and

n is an integer at least equal to 2 and at most equal to the number of cationic charges present in the fluorescent compound; and



wherein R is chosen from methyl and ethyl radicals; R' is a methyl radical, and X⁻ is an anion.

47. The method according to Claim 46, wherein in the formula (F3) defining R₁ and R₂, the linear and branched alkyl radicals are chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms.

48. The method according to Claim 46, wherein in the formula (F3) defining R₁ and R₂, the heterocycle is optionally substituted with at least one alkyl radical chosen from linear and branched alkyl radicals comprising from 1 to 4 carbon atoms.

49. The method according to Claim 46, wherein in the formula (F4), X⁻ is an anion chosen from chloride, iodide, sulphate, methasulphate, acetate, and perchlorate.

50. The method according to Claim 40, wherein the at least one fluorescent dye is present in an amount ranging from 0.01% to 20% by weight, relative to the total weight of the composition.

51. The method according to Claim 50, wherein the at least one fluorescent dye is present in an amount ranging from 0.05% to 10% by weight, relative to the total weight of the composition.

52. The method according to Claim 51, wherein the at least one fluorescent dye is present in an amount ranging from 0.1% to 5% by weight, relative to the total weight of the composition.

53. The method according to Claim 40, wherein the at least one polyol of the

formula (I) is present in an amount ranging from 0.01% to 30% by weight, relative to the total weight of the composition.

54. The method according to Claim 53, wherein the at least one polyol of the formula (I) is present in an amount ranging from 0.1% to 20% by weight, relative to the total weight of the composition.

55. The method according to Claim 54, wherein the at least one polyol of the formula (I) is present in an amount ranging from 0.5% to 10% by weight, relative to the total weight of the composition.

56. The method according to Claim 40, wherein the keratin material is chosen from artificially colored and pigmented keratin fibers and dark skin.

57. The method according to Claim 56, wherein the keratin fibers are hair.

58. The method according to Claim 57, wherein the hair has a tone height of less than or equal to 6.

59. The method according to Claim 58, wherein the hair has a tone height of less than or equal to 4.